

REMARKS

Claims 1, 3-13, 15-17, and 19-23 are pending in this application. Claims 1, 13, 17 and 21 are independent claims. Reconsideration and allowance of the present application are respectfully requested.

Claim Rejections Under 35 U.S.C. § 103

Claims 1, 3, 4, 6-13, 15, 17, 19, 21 and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. 2001/0055356 to Davis (hereinafter “Davies”) in view of U.S. Patent Publication No. 2005/0031051 to Rosen et al. (hereinafter “Rosen”). This rejection is respectfully traversed.

Claim 1, upon which claims 3-12 depend, recites “a method of controlling a multicast transmission, comprising: (a) transmitting a data packet to a plurality of slave devices across an ultra wideband (UWB) wireless network; (b) detecting the reception of any acknowledgement transmissions, wherein each acknowledgement transmission indicates reception of the data packet by a respective one of the plurality of slave devices; (c) retransmitting the data packet to at least one of the plurality of devices when an acknowledgment is not detected for each of the plurality of devices; (d) counting the number of consecutive times an acknowledgement packet is not received from a particular one of the plurality of devices; and (e) foregoing retransmission of the data packet until said number of consecutive times exceeds a predetermined threshold or when step (b) detects an acknowledgement transmission from the each of the plurality devices except for said particular device.”

Claim 13, upon which claims 15-16 depend, recites “a wireless communications device, comprising: a transmission buffer configured to store a packet for transmission across an ultra wideband (UWB) wireless network to a plurality of slave devices; a retransmission buffer configured to store a retransmission packet, the retransmission packet being previously transmitted across the UWB wireless network; a retransmission controller configured to receive one or more acknowledgment transmissions from the plurality of devices; counting the number of consecutive times an acknowledgement packet is not received from a particular one of the plurality of devices; and foregoing retransmission of the data packet until said number of

consecutive times exceeds a predetermined threshold or when an acknowledgement transmission from the each of plurality devices except for said particular device is detected; wherein the retransmission controller is further configured to cause the retransmission buffer to send the retransmission packet to the plurality of slave devices across the UWB wireless network when an acknowledgment is not detected for each of the plurality of devices.”

Claim 17, upon which claims 19 and 20 depend, recites “a system for controlling a multicast transmission, comprising: means for transmitting a data packet to a plurality of devices across an ultra wideband (UWB) wireless network; means for detecting the reception of any acknowledgement transmissions, wherein each acknowledgement transmission indicates reception of the data packet by a respective one of the plurality of devices; means for retransmitting the data packet to the one or more slave devices when an acknowledgment is not detected for each of the one or more sieve devices; means for counting the number of consecutive times an acknowledgement packet is not received from a particular one of the plurality of devices; and means for foregoing retransmission of the data packet until said number of consecutive times exceeds a predetermined threshold or when said means for detecting detects an acknowledgement transmission from the each of the plurality devices except for said particular device.”

Claim 21, upon which claims 22 and 23 depend, recites “a computer-readable medium encoded with processing instructions for implementing a method of controlling multicast transmission, performed by a wireless communications device, the method comprising: (a) transmitting a data packet to a plurality of devices across an ultra wideband (UWB) wireless network; (b) detecting the reception of any acknowledgement transmissions, wherein each acknowledgement transmission indicates reception of the data packet by a respective one of the plurality of devices; (c) retransmitting the data packet to at least one of the plurality of slave devices when an acknowledgment is not detected for each of the plurality of devices; (d) counting the number of consecutive times an acknowledgement packet is not received from a particular one of the plurality of devices; and (e) foregoing retransmission of the data packet until said number of consecutive times exceeds a predetermined threshold or when step (b) detects an acknowledgement transmission from the each of the plurality devices except for said particular device.”

As noted below, Davis and Rosen do not teach or suggest the combination of elements recited in claims 1, 3, 4, 6-13, 15, 17, 19, 21 and 22.

Davis discloses a master radio station for use in a multicast radio network. The multicast radio network includes a master station and a plurality of slave stations. The master station includes means for commanding at least one of the slave stations of the plurality of slave stations to adopt a first state, wherein the slave station transmits a positive acknowledgement in response to receiving data that it does not need to have retransmitted. The master station also includes means for commanding at least one other of the slave stations of the plurality to adopt a second state, wherein the slave station does not transmit an acknowledgement in response to receiving data that it does not need to have retransmitted and transmits a negative acknowledgement in response to receiving data which it needs to have retransmitted. The master station further includes means for instructing each slave station in the first state of a time slot in which to transmit the positive acknowledgement such that positive acknowledgements transmitted by more than one slave stations are transmitted at substantially non-overlapping times. The master station also includes means for transmitting data to the plurality of slave stations simultaneously, means for receiving acknowledgements from the plurality of slave stations, and means for retransmitting the data if the positive acknowledgement is not received from each of the slave stations in the first state or if at least one negative acknowledgement is received, and if the validity of the data has not expired. See at least paragraph 0022 of Davis.

Rosen discloses that a simple form of automatic gain control is merely an acknowledgement from the receiver, for example, where a one-way communication is initiated (such as a preformatted message from the device 800 of FIG. 8). The receiver can, upon sufficient receipt and decoding of the message, send back an ACK message which terminates further transmissions. Alternatively, if no ACK is received from the receiver, the message transmitter may then automatically increment the gain and/or vary other parameters of the waveform and retransmit the message, hopefully receiving an ACK. This process can proceed until an ACK is received, or alternatively until a preset gain threshold is reached (corresponding to e.g., a EIRP that would increase probability of intercept beyond a safe value), at which point, alternate communication channels and/or parameters may be invoked. Similarly, a NACK may be used by the distant receiver to identify those situations where the message was incompletely

received, the user's authentication failed, or other such conditions exist. The ACK or NACK may also be used to selectively disable the device. See at least paragraph 0131.

Applicants submit that the combination of Davis and Rosen does not teach or suggest the combination of elements recited in claims 1, 3, 4, 6-13, 15, 17, 19, 21 and 22. Independent claims 1 and 21, in part, recite “foregoing retransmission of the data packet until said number of consecutive times exceeds a predetermined threshold or when step (b) detects an acknowledgement transmission from the each of the plurality devices except for said particular device.”

Independent claim 13, in part, recites “counting the number of consecutive times an acknowledgement packet is not received from a particular one of the plurality of devices; and forego retransmission of the data packet until said number of consecutive times exceeds a predetermined threshold or when an acknowledgement transmission from the each of plurality devices except for said particular device is detected.”

Independent claim 17, in part, recites “means for counting the number of consecutive times an acknowledgement packet is not received from a particular one of the plurality of devices; and means for foregoing retransmission of the data packet until said number of consecutive times exceeds a predetermined threshold or when said means for detecting detects an acknowledgement transmission from the each of the plurality devices except for said particular device.” As acknowledged in the Office Action, Davis does not teach or suggest these features.

The Office Action alleged, however, that paragraph 0131 of Rosen discloses “foregoing retransmission of the data packet until said number of consecutive times exceeds a predetermined threshold,” as recited in claims 1, 13, 17 and 21. As noted in the previous Response filed on May 27, 2008, paragraph 0131 of Rosen discloses that the retransmission process can proceed until an ACK is received, or alternatively until a preset gain threshold is reached, at which point, alternate communication channels and/or parameters may be invoked. Thus, Rosen discloses that retransmission is repeated until the gain and/or various other parameters of the waveform reach a preset gain threshold. That is, in Rosen retransmission is repeated as long as the gain and/or various other parameters of the waveform are less than a preset gain threshold. (underlining added)

Claims 1, 13, 17 and 21, on the other hand, recite “foregoing retransmission of the data packet until said number of consecutive times exceeds a predetermined threshold.” Thus, the teachings of Rosen are contrary to “foregoing retransmission of the data packet until said number of consecutive times exceeds a predetermined threshold,” as recited in the pending claims.

In the Response to Arguments section, the Office Action indicated that Applicants’ previous argument that “retransmission is withheld until the predetermine threshold is exceeded” is not recited in the pending claims. Each of the pending claims recites “foregoing retransmission of the data packet until said number of consecutive times exceeds a predetermined threshold.” Therefore, contrary to the statement made in the Response to Arguments sections, Applicants submit that each of the pending claims does in fact recite withholding/foregoing “retransmission of the data packet until said number of consecutive times exceeds a predetermined threshold,” as recited in the pending claims.

Claims 1, 13, 17 and 21 also recites foregoing retransmission of the data packet until when said means for detecting detects an acknowledgement transmission from the each of the plurality devices except for said particular device. There is no teaching or suggestion in Rosen of this feature. Therefore, Rosen fails to teach or suggest “foregoing retransmission of the data packet until said number of consecutive times exceeds a predetermined threshold or when step (b) detects an acknowledgement transmission from the each of the plurality devices except for said particular device,” as recited in the pending claims.

Based on the distinctions noted above, Applicants respectfully request that this rejection of claims 1, 13, 17 and 21 under 35 U.S.C. §103 be withdrawn. Each of claims 3, 4, 6-12, 15, 19 and 22 depends on claims 1, 13, 17 and 21, and thus incorporates all of the elements of claims 1, 13, 17 and 21, in addition to the further limitations recited in claims , 4, 6-12, 15, 19 and 22. Therefore, Applicants respectfully request that this rejection of claims under 35 U.S.C. §103 be withdrawn.

Claims 5, 16, 20 and 23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Davies in view of Rosen et al., and in further view of U.S. Patent Publication No. 2002/0136268 to Gan et al. (hereinafter “Gan”). This rejection is respectfully traversed.

Each of claims 5, 16, 20 and 23 depend on claims 1, 13, 17 and 21, and thus, incorporates each of the elements of these claims. Gan does not cure the deficiencies of Davis and Rosen, as outlined above. Specifically, Gan does not teach or suggest “foregoing retransmission of the data packet until said number of consecutive times exceeds a predetermined threshold or when said means for detecting detects an acknowledgement transmission from the each of the plurality devices except for said particular device,” as recited in 1, 13, 17 and 21 upon which claims 5, 16, 20 and 23 depend. Therefore, Applicants respectfully request that this rejection of claims 5, 16, 20 and 23 under 35 U.S.C. §103 be withdrawn.

Disclaimer

Applicants may not have presented all possible arguments or have refuted the characterizations of either the claims or the prior art as found in the Office Action. However, the lack of such arguments or refutations is not intended to act as a waiver of such arguments or as concurrence with such characterizations.

CONCLUSION

In view of the above, consideration and allowance are respectfully solicited.

In the event the Examiner believes an interview might serve in any way to advance the prosecution of this application, the undersigned is available at the telephone number noted below.

The Office is authorized to charge any necessary fees to Deposit Account No. 22-0185.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 27592-00431-US from which the undersigned is authorized to draw.

Dated: October 17, 2008

Respectfully submitted,

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